

APPENDIX 1 TELECOMMUNICATIONS AND INFORMATION SYSTEMS

PRIMARY AGENCY: Washington State Military Department
Emergency Management Division
Washington State Department of Information Services

SUPPORT AGENCIES: Washington State Department of Ecology
Washington State Department of Fish and Wildlife
Washington State Department of General Administration
Washington State Department of Health
Washington State Liquor Control Board
Washington State Military Department
National Guard
Washington State Department of Natural Resources
Washington State Parks and Recreation Commission
Washington State Patrol
Washington State Department of Transportation
Washington State Utilities and Transportation Commission
All Other State Agencies
Federal Emergency Management Agency
Telecommunications Service Providers
Local Jurisdiction Emergency Management Organizations

I. INTRODUCTION

A. Purpose

To organize, establish, and maintain the telecommunications and information system capabilities necessary to meet the operational requirements of state and local jurisdictions in responding to and recovering from emergencies and disasters.

B. Scope

See Emergency Support Function (ESF) 2, Telecommunications/Information Systems and Warning.

II. POLICIES

See ESF 2, Telecommunications/Information Systems and Warning.

III. SITUATION

A. Emergency/Disaster Conditions and Hazards

See ESF 2, Telecommunications/Information Systems and Warning.

B. Planning Assumptions

See ESF 2, Telecommunications/Information Systems and Warning.

IV. CONCEPT OF OPERATIONS**A. General**

1. Post-emergency or disaster routine modes of telecommunications and information systems that are operational will continue to be used after the occurrence of the event. Routine modes of telecommunications and information systems include commercial telephone and data systems, two-way radio systems, and dedicated leased lines, operated by the state and federal government, as well as, any other mode from private industry.
2. Local jurisdictions utilize commercial communication systems and local government systems that include use of mutual aid channels (On-scene Control and Coordination Radio (OSCCR) and other common capabilities), and may request state assistance, when necessary. Too often, local jurisdictions are not able to communicate due to lack of common frequencies and/or capabilities.
3. A Telecommunications Coordinating Committee, as requested by the Emergency Management Division (EMD), may advise the Washington State Military Department on the availability, selection, and use of telecommunications/information system capabilities during all four phases of emergency management.
4. Telecommunications operations shall be accomplished at the state and local jurisdiction level, either jointly or independently.
5. Support actions are managed by the exception concept with the smallest jurisdiction with the capability to respond doing so. State level of activities will support local jurisdiction requirements.
6. The state Telecommunications and Warning Program Manager and the ESF 2 Telecommunications Cell will coordinate the provision of state resources to satisfy requests for telecommunications and information systems assistance. If applicable, priority restoration and provisioning of telecommunications and/or information system services will be accomplished in accordance with the Telecommunications Service Priority (TSP) planning guidance, published separately.
7. Washington State Military Department, EMD will request and coordinate federal telecommunications assistance to satisfy requirements that cannot be met with state and/or local jurisdiction resources. Priorities for filling requests will be set by the Director for the state EMD, with advice and recommendations from the Telecommunications and Warning Program Manager and the Emergency Operations Center (EOC) Supervisor.

8. The identification, acquisition, prioritization, and deployment of telecommunications and information system assets will be coordinated as appropriate within the EOC (other ESFs) to assure continuity and consistency of state response actions.
9. When an event occurs the following actions will be initiated or accomplished:
 - a. There will be continuous operation and maintenance of the local jurisdiction medical, fire, law enforcement, and public works radio networks.
 - b. Activation of the state and local jurisdiction EOCs and communications systems (CEMNET, SECURE, RACES, EAS, and commercial telephone) will occur, if available. As a general rule, one of these networks, in addition to any available telephone capability, should be immediately employed to establish contact between the local jurisdiction EOC and the state EOC.
 - (1) Satellite Telephone, phone number: 888-862-8459
 - (2) CEMNET via Channel F1 – 45-20 MHz (Northwest/Northeast regions), Channel F2 – 45.36 MHz (Southwest/Southeast regions), Channel F3 – 45.48 MHz (Central region), Call sign – State EOC.
 - (3) RACES HF (Washington Emergency Net) – 3.987 MHz, Call sign – WA7PHD.
 - (4) RACES HF (Packet) – 3.624 MHz.
 - (5) RACES VHF (Voice) – 145.37 MHz, Call sign – W7EMD.
 - (6) RACES VHF (Packet) – 145.01 MHz (Seattle Node), W7EMD-4.
 - (7) NAWAS voice circuit.
 - (8) ACCESS (teletype) – Address: OLYEM.
 - (9) S.E.C.U.R.E. HF – 7.935 MHz (USB) – Day.
S.E.C.U.R.E. HF – 2.411 MHz (USB) – Night.
 - (10) Internet/E-mail services
 - c. Activation of the 800 MHz State Agency Emergency Network, on System 2, Group 2.

B. Organization

See ESF 2, Telecommunications/Information Systems and Warning.

C. Procedures

See ESF 2, Telecommunications/Information Systems and Warning.

D. Mitigation Activities

1. Primary Agencies

a. Washington State Military Department, Emergency Management Division

- (1) Chairs the Telecommunications Coordinating Committee of EMD.
- (2) Supports state agency requests for emergency communications equipment with the Legislature.

b. Washington State Department of Information Services

- (1). Support state agency development of disaster recovery/business resumption plans and information system security plans.
- (2) Participates on the Telecommunications Coordinating Committee of EMD to coordinate response and recovery activities.

2. Support Agencies

a. Washington State Departments of Health, General Administration, Military Department - National Guard, Natural Resources, Washington State Patrol, Transportation, and the Utilities and Transportation Commission

Participates on the Telecommunications Coordinating Committee of the EMD to coordinate response and recovery activities, ensure communications resources are available to support emergency operations, and to encourage and promote interoperability and survivability when upgrading or implementing new systems, when requested.

b. Local Jurisdiction Emergency Management Organizations

Encourages and promotes mutual aid and interoperability between local jurisdiction communications networks.

3. All Agencies

- a. Develop and periodically review Disaster Recovery/Business Resumption Plans per the Department of Information Services (DIS), Information Services Board (ISP), *Information Technology Policy Manual*.

- b. Develop and periodically review Information Technology Security Plans per DIS, ISB, *Information Technology Policy Manual*.

E. Preparedness Activities

1. Primary Agency

a. Washington State Military Department, Emergency Management Division

- (1) Prepares and maintains state communications plans.
- (2) Establishes and maintains communications capabilities and equipment at the state EOC to include a limited mobile capability utilized to accomplish assigned missions and continuity of government.
- (3) Monitors and maintains CEMNET and NAWAS communications capabilities supporting local jurisdiction EOCs. Monitors the 800 MHz State Agency Emergency Network.
- (4) Coordinates, as applicable, with state, federal, and local jurisdiction agencies on matters relating to communications plans, programs, systems, administration, and operations.
- (5) Administers the licensing of the On-Scene Control and Coordination Radio (OSCCR) frequency for use by local jurisdictions.
- (6) Encourages and promotes interoperability among state systems, state and local jurisdiction systems, and local jurisdiction interagency systems.
- (7) Assists local jurisdiction emergency management organizations on matters relating to communications plans, programs, systems, administration, and operations.
- (8) Provides detailed communications systems operating instructions to state agencies, district, and local jurisdiction emergency management communications personnel and, as required, to the personnel of other state and federal agencies.
- (9) Maintains a current inventory of communication systems and facilities owned by state agencies that have any emergency management assignment.
- (10) Provides for the coordination, training, and supervision of personnel in the state Radio Amateur Civil Emergency Services (RACES) organization.

- (11) Provides coordination for the utilization of the Amateur Radio Emergency Services (ARES).
- (12) Coordinates with other state agencies, the Federal Emergency Management Agency (FEMA), television and radio broadcast stations, telecommunications service providers, manufacturers, and others to ensure that information is available. This information should cover all forms of communications that may be utilized by the state during an emergency or disaster, and to resolve problems arising from their use.
- (13) Provides training, supervision, and assistance to the state Duty Officers and other personnel required to operate communications systems and equipment in the state EOC and communications center.
- (14) Develops and maintains an inventory of agency communications capabilities and resources, noting availability and response criteria.
- (15) Maintains ESF 2 for utilization of all communications equipment available to the state during an emergency or disaster.
- (16) Coordinates with all appropriate state agencies to ensure each agency with communications capabilities has appropriate procedures to support their assigned emergency management mission.
- (17) Conducts frequent tests and exercises of the state's communications capabilities and this plan, as required.
- (18) Provides assistance and coordination to local jurisdictions in coordinating communications and warning ESFs.
- (19) Administers the Telecommunications Service Priority (TSP) Program.

b. Washington State Department of Information Services

Coordinate with supported agencies to periodically exercise disaster recovery/business resumption plans and restoration of information systems.

2. Support Agencies

- a. Departments of Ecology, Fish and Wildlife, General Administration, Health, Liquor Control Board, Military Department - National Guard, Natural Resources, Parks and Recreation Commission, State Patrol, Transportation, Utilities and Transportation Commission, and all other state agencies.**

- (1) Develops and maintains an inventory of their agency communications capabilities and resources, noting the availability and response criteria.
- (2) Develops and maintains appropriate Standard Operating Procedures (SOPs) in support of this ESF.
- (3) Determines, identifies, and informs agency senior management of deficiencies or limitations that prohibit support of this ESF.

b. Federal Emergency Management Agency

- (1) Assists the state in the coordination of communications plans and systems.
- (2) Provides financial assistance in the procurement of necessary communications equipment, and the maintenance and recurring charges connected to them, when applicable.

c. Telecommunications Service Providers

Assures local exchange and interexchange telecommunications companies maintain updated emergency restoration plans with the Washington State Utilities and Transportation Commission.

d. Local Jurisdiction Emergency Management Organization

- (1) Maintains local jurisdiction operational communications in a high state of preparedness.
- (2) Prepares and maintains local jurisdiction communications plans in accordance with state and federal criteria.
- (3) Transmits general messages and warning information to secondary communications points.

3. All Agencies

Periodically test and exercise disaster recovery/business resumption plans and security plans to ensure agency staff personnel are familiar and aware of agency roles and responsibilities.

F. Response Activities**1. Primary Agencies****a. Washington State Military Department, Emergency Management Division**

- (1) Provides advice and coordination for the restoration of key communications networks needed for the response and recovery activities upon activation of the Telecommunications Coordinating Committee of the EMD.
- (2) Operates and maintains internal and external communications systems in support of the state EOC.
- (3) Establishes radio and/or telephone communications with each county in the affected area.
- (4) Establishes communications with the FEMA and/or adjacent states as necessary.
- (5) Coordinates and directs assistance, including procurement of communications equipment, to local jurisdictions and other state agencies in support of their emergency communication needs with specific emphasis on lifesaving and medical support.
- (6) Coordinates, integrates, and manages the overall state telecommunications support.
- (7) Assesses operational status of and impact on state, local jurisdiction, and commercial telecommunications systems and facilities.
- (8) Coordinates and monitors the status of the restoration of commercial services and facilities. Where applicable, restoration will be accomplished under the TSP program.
- (9) Coordinates and prioritizes requests for federal telecommunications support and assistance.
- (10) Immediately coordinates with cellular companies and mobile/portable radio companies for the availability and proper employment by state and local jurisdictions of mobile/portable equipment within the impacted areas.
- (11) Coordinates the allocation, deployment, and location of mobile/transportable communications systems provided from state, commercial, or federal resources.

- (12) Assures that an adequate staff of trained communications personnel, including amateur radio operators, are identified and available to assist.
- (13) Provides assistance to the appropriate authorities in the activation of the state EAS.
- (14) Ensures all agencies with communications capabilities are advised of conditions and are taking appropriate actions.
- (15) Disseminates warning information primarily through National Warning System (NAWAS) or if necessary through all other available communications systems.
- (16) Takes protective measures against electromagnetic pulse as necessary.
- (17) Maintains priorities on transmission of traffic.

b. Washington State Department of Information Services

- (1) Provides a telecommunications and information systems representatives, on a 24-hour basis, to augment the state EMD, ESF 2 telecommunications staff in the coordination, implementation, and monitoring of the recovery of telecommunications services and information systems, upon request.
- (2) Provides information to the state EMD regarding damage and operational status of Local Telephone Service (LTS), State Controlled Area Network (SCAN), Data Transport Service (DTS) network services, and other information technology system issues impacting the recovery and resumption of vital state services.
- (3) Implements emergency or disaster recovery procedures for the restoration of LTS, SCAN, and DTS circuits/services with priority to the restoration of state and local jurisdiction emergency response agencies and then to key state agencies with continuity of government responsibilities

2. Support Agencies

a. Washington State General Administration

When requested by the state EMD, provide assistance in the emergency acquisition of two-way radio equipment and/or other telecommunication/information systems equipment.

b. Washington State Military Department, National Guard

- (1) When requested by the state EMD, provides a communications representative, on a 24-hour basis, to augment the communications staff in the state EMD EOC by assisting in the coordination, implementation, and monitoring of the operational status of the STARC network and employment of organizational communications assets.
- (2) When requested by the state EMD, provides radiotelephone operators on a 24-hour basis, to operate the emergency management two-way radio system (CEMNET, STARC radio, and SECURE) in the state EOC Communications Center.
- (3) Be prepared to deploy and provide organizational communications equipment:
 - (a) Provides High Frequency (HF) point-to-point communications between local jurisdictions and state EOCs.
 - (b) Provides or restores access to local telephone exchanges or interexchange carrier switching centers (to include the Department of Information Services (DIS) SCAN/LTS) through use of line-of-sight (LOS) microwave or satellite systems.
 - (c) Provides telephone support between state and local jurisdiction EOCs and/or to impacted areas where local service has been completely lost through use of tactical switching systems established through LOS microwave or satellite systems.
 - (d) Provides air traffic control and air-to-ground communications to support response and recovery operations.
 - (e) Provides message center support to local jurisdiction EOCs through the armories, where feasible.
 - (f) Provides HF/VHF point-to-point communications within a local jurisdiction.
 - (g) Deploys mobile communications centers to support state or local jurisdictions needs.

c. Washington State Departments of Ecology, Fish and Wildlife, Health, Liquor Control Board, and the Parks and Recreation Commission

- (1) Provides, if requested and resources are available, two-way radio communications support to the state EOC, other

state agencies, and local jurisdictions through the deployment of personnel and mobile/portable assets. Provides access to state EMD via CEMNET, and the Department of Health, Emergency Medical Services and Trauma Systems, Department of Natural Resources, and Washington State Patrol via VHF/UHF two-way radio systems.

- (2) Provides information to the state EMD regarding damage and operational status of communications systems and equipment.

d. Washington State Department of Natural Resources

- (1) Provides, if requested and resources are available, two-way radio communications support, to state EMD and/or local jurisdictions by deploying personnel and mobile/portable assets (radio cache) and provide radio access to agency VHF radio systems. Potential missions for the use of the radio cache and VHF systems are to:
 - (a) Provide command and control capability for local jurisdictions.
 - (b) Provide command and control capability for search and rescue operations.
 - (c) Provide command and control capability for state agencies.
 - (d) Provide radio-to-telephone interface as needed.
 - (e) Provide aeronautical multi-communications station capability, as required.
- (2) Provides information to the state EMD regarding damage and operational status of two-way radio systems and telecommunications services.

e. Washington State Patrol

- (1) Provides, if requested and resources are available, two-way radio communications support, to the state EMD and/or local jurisdictions by deploying personnel and mobile/portable assets to provide access to VHF radio systems.
- (2) Provides continuous support to the state EOC for employment of CEMNET, ACCESS, and NLECS (EAS radio relay).

- (3) Provides a communications representative (radio systems engineer), on a 24-hour basis, to augment the communications staff by coordinating, implementing, and monitoring of the operational status and recovery of agency networks supported by the Washington State Patrol, when requested by the state EMD.
- (4) Provides information to the state EMD regarding damage and operational status of two-way radio systems, microwave radio systems, and telecommunications systems.
- (5) Prepares, in coordination with local telephone carriers, to provide access by state or local jurisdiction agencies to the Washington State Patrol telephone network.

f. Washington State Department of Transportation

- (1) Provides, if requested and resources are available, two-way radio communications support to the state EMD, other state agencies, and local jurisdictions by deploying personnel and mobile/portable assets to provide access to UHF (800 MHz) radio systems.
- (2) Provides information to the state EMD regarding damage and operational status of two-way radio systems, and telecommunications systems.

g. Washington State Utilities and Transportation Commission

- (1) Provides a telecommunications representative, on a 24-hour basis to assist the communications staff by coordinating, implementing, and monitoring the recovery or provision of telecommunications services, when requested by the state EMD.
- (2) Provides regulatory guidance concerning telecommunications services and issues that affect the emergency or disaster area.

h. Federal Emergency Management Agency

- (1) Provides telecommunications service from the FEMA Region X, Region Operations Center (ROC) to the state EOC via LOS microwave and/or satellite systems.
- (2) Provides two-way radio repeater and/or radio relay support in the following priority:
 - (a) Alternate communications between the FEMA ROC and the state EOC.

- (b) Alternate communications between the state EOC and any effected local jurisdiction EOC as determined by the state EMD.
 - (c) Alternate communications in support of the local jurisdiction EOC needs as determined by the state EMD.
- (3) Provides a Communications Liaison to the state EOC Communications Section, for the purpose of:
 - (a) Coordinating the use of federal communications assets.
 - (b) Coordinating telecommunications provision or recovery that needs NCS approval.
 - (c) Coordinating frequency management issues with the Federal Communications Commission (FCC).
 - (d) Coordinating contract or purchasing of communications equipment and services that cannot be met through the use of state or local jurisdiction resources.

i. Telecommunications Service Providers

- (1) Coordinates and implements recovery plans with the state EOC.
- (2) Provides information to the state EOC regarding damages to telecommunications facilities and networks affected by the event and identify surviving capabilities and networks.
- (3) Restores services in the following priority:
 - (a) Trunks to E9-1-1/9-1-1 communications centers/Public Safety Answering Points (PSAP).
 - (b) Trunks to state and local jurisdiction EOCs.
 - (c) Trunks to and between LTS and SCAN switching centers.
 - (d) Circuits supporting DTS node centers.
- (4) Provides a telecommunications liaison, on a 24-hour basis, to the state EOC to advise and assist in the coordination and monitoring of the recovery of services and facilities, when requested by the state EMD.

- (5) Establishes, if available and via the state EMD HF radio network, a two-way radio communications capability in their respective local jurisdiction operations/network centers to communicate with the state EOC.

G. Recovery Activities

All Agencies

1. Activated telecommunications and information systems will continue to support recovery operations, as required.
2. Will return to normal activities when no longer needed or when normal systems and facilities are restored.
3. Restore telecommunications and information system facilities and systems not used in response activities until full services are available to state and federal government, and local jurisdictions and the public at-large.
4. Conduct damage assessments of facilities and equipment, and initiate repairs and mitigation activities.

V. RESPONSIBILITIES

A. Primary Agencies

Washington State Military Department, Emergency Management Division and Washington State Department of Information Services

See ESF 2, Telecommunications/Information Systems and Warning.

B. Support Agencies

Washington State Departments of Ecology, Fish and Wildlife, General Administration, Health, Liquor Control Board, Military Department - National Guard, Natural Resources, Washington State Patrol, Transportation, Parks and Recreation Commission, Utilities and Transportation Commission, All Other State Agencies, Federal Emergency Management Agency, Telecommunications Service Providers, and the Local Jurisdiction Emergency Management Organizations

See ESF 2, Telecommunications/Information Systems and Warning.

VI. RESOURCE REQUIREMENTS

See ESF 2, Telecommunications/Information Systems and Warning.

VII. REFERENCES

See ESF 2, Telecommunications/Information Systems and Warning.

VIII. TERMS AND DEFINITIONS

See Appendix 4, Comprehensive Emergency Management Plan, Definitions.

IX. TABS

Tab A, Priority Channels for Mutual Aid, Interoperability, and Direction and Control

Tab B, Comprehensive Emergency Management Network (CEMNET)

Tab C, State Emergency Communications Using Radio Effectively (SECURE)

Tab D, Radio Amateur Civil Emergency Services (RACES)

Tab E, Other Frequencies Monitored

Tab F, Other Voice/Data Systems